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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,450	12/15/2003	Yoshiyuki Ando	YA06	1449

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EXAMINER	
MILLER, CRAIG S	

ART UNIT	PAPER NUMBER
2857	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/707,450	ANDO, YOSHIYUKI	
	Examiner	Art Unit	
	Craig Miller	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 September 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) *33-36* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32 and 37-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

I. The species as described in specification paragraph [27], (best illustrated by claims 33-37).
II. The species as described in specification paragraph [29], (best illustrated by claims 1-18, 20-32 and 38-40).

Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently no claim is deemed generic. Claim 19 links inventions I and II, should claim 19 as now claimed be deemed allowable the inventions shall be rejoined.

2. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

3. During a conversation with Richard D. Fuerle on 29 November 2004 a provisional election was made with traverse to prosecute the invention of II, claims 1-32. Affirmation of this election must be made by Applicant in responding to this Office action. Claims 33-40 are withdrawn from further consideration by the Examiner as being drawn to a non-elected invention, 37 CFR 1.142(b).

4. The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper time-wise extension of the "*right to exclude*" granted by a patent. *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> *A person shall be entitled to a patent unless --*
> *(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

6. Claims 1, 2, 6-9, 11, 16, 20-31 and 37-40 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Stapleton *et al.* (6,574,577 B2).

As to claims 1, 2, 6-9, 11, 16, 21-31 and 37-40, Stapleton *et al.* discloses obtaining system performance at different supply voltages and entering the values based upon the performance data into a programmable reference table where at least a power supply voltage is controlled (col. 1 lines 51+).

7. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
>
> Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

8. Claims 3-5, 10, 12-14, 17-19 and 32 are rejected under 35 U.S.C. 103 as being unpatentable over Stapleton et al.

Claims 3-5, 14 are directed towards well known IC testing design parameters. The Examiner takes notice that body-bias voltage, clock speed and temperature are well known IC

testing parameters. Because the device of Stapleton *et al.* is in the art of IC testing and because it is known to perform IC testing using such test design criteria, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Stapleton *et al.* such known testing goals so as to receive the expected benefits derived there from such as enhanced system reliability at improved clock speeds or increased operating voltage ranges absent a showing of unexpected results or synergistic results from any particular claimed combination.

Claim 10 is directed towards the well known practice of testing ICs during manufacturing. Because the device of Stapleton is in the art of IC testing and because it is known to perform testing during the manufacturing process, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Stapleton such known manufacturing testing so as to receive the expected benefits derived there from such as enhanced system reliability absent a showing of unexpected results or synergistic results from any particular claimed combination.

Claims 12 and 13 are directed towards well known clock delivery circuits. The Examiner takes notice that minimizing skew values and using a delay locked loop circuit for clock delivery are well known IC test parameters. Because the device of Stapleton *et al.* is in the art of IC testing and because it is known to perform IC testing using such test design criteria, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Stapleton *et al.* such known testing goals so as to receive the expected benefits derived there from such as enhanced system reliability absent a showing of unexpected results or synergistic results from any particular claimed combination.

Claims 17 and 18 are directed towards determining conventional ranges of operation of processor voltages and clock speeds. The Examiner notes In re Aller, 105 USPQ 233 (CCPA 1955), "*...changes such as these may impart patentability to a process if the particular ranges claimed produce a new and unexpected result which is different in kind and not merely in degree from the results of the prior art.*" In re Dreyfus, 22 CCPA (Patents) 830, 73 F.2d 931, 24 USPQ 52 and In re Waite et al., 35 CCPA (Patents) 1117, 168 F.2d 104, 77 USPQ 586.

Claim 19 and 32 are directed towards circuits with MEMS components. Because the device of Stapleton is in the art of IC testing and because it is known that MEMS components are controlled by ICs, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Stapleton such known MEMS components so as to receive the expected benefits derived there from such as enhanced system flexibility absent a showing of unexpected results or synergistic results from any particular claimed combination.

9. Claims 4, 12, 13 and 15 are rejected under 35 U.S.C. 103 as being unpatentable over Stapleton et al. as applied to claim 1 above and further in view of Kothandaraman *et al.* (6,624,499 B2).

Claim 4 is directed towards testing at different clock speeds. Stapleton *et al.* discloses the claimed invention essentially as claimed but does not specify that one should test an IC at different clock speeds. Kothandaraman *et al.* discloses that one should test a circuit at different clock speeds to determine optimal clock speeds (col. 1 lines 20+). Because the devices of Stapleton *et al.* and Kothandaraman *et al.* are in the art of IC testing and because Kothandaraman *et al.* discloses that one should test an IC at different clock speeds, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Stapleton *et al.* such known testing goals so as to receive the expected benefits derived there from such as enhanced system reliability absent a showing of unexpected results or synergistic results from any particular claimed combination.

Claims 12 and 13 are directed towards well known clock delivery circuits. The Examiner takes notice that minimizing skew values and using a delay locked loop circuit for clock delivery are well known IC test parameters. Kothandaraman *et al.* discloses that one should test a circuit at different clock speeds to determine optimal clock speeds (col. 1 lines 20+). Because the devices of Stapleton *et al.* and Kothandaraman *et al.* are in the art of IC testing, because such delivery circuits are well known within the art and because Kothandaraman *et al.* discloses that one should test an IC at different clock speeds, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Stapleton *et al.* such known clock delivery circuits so as to receive the expected benefits derived there from such as

enhanced system reliability absent a showing of unexpected results or synergistic results from any particular claimed combination.

Claim 15 is directed towards selecting among operational blocks. Stapleton *et al.* discloses the claimed invention essentially as claimed but does not specify that one should select among operational blocks. Kothandaraman *et al.* discloses that one should select between redundant elements (col. 1 lines 20+). Because the devices of Stapleton *et al.* and Kothandaraman *et al.* are in the art of IC testing and because Kothandaraman *et al.* discloses that one should select between operational blocks, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Stapleton *et al.* such operational block selection so as to receive the expected benefits derived there from such as enhanced system reliability absent a showing of unexpected results or synergistic results from any particular claimed combination.

10. Claims 1-32 and 37-40 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 1, 1, 1, 1, 1, 1, 1, 8, 10, 16, 15, 15, 1, 1, 1, 6, 7, 1, 5, 2, 18, 19, 1, 18, 19, 1, 1, 18, 19, 4, 5, 1, 5, 4 and 1, respectively, of U.S. patent 6,792,379 (hereafter referred to as '379). Although the conflicting claims are not identical, they are not patentably distinct from each other for the reasons cited below.

Because it is deemed obvious that a generic means is an acceptable substitute for a specific means providing one is willing to forego any advantages provided by the use of the specific means and the remaining portions work as before, In re Karlson, 136 USPQ 184 (CCPA 1963), In re Wilson, 153 USPQ 740 (CCPA 1967) and Ex Parte Rainu, 168 USPQ 375 (PTO Bd. Of App. 1969), because '379 is directed towards specific memory storage means, anti-fuse, while the instant claims include generic programmable memories and because in the instant case, no benefit of the specific means is claimed, the claims are obvious variants of each other.

Claims 12 and 13 are directed towards well known clock delivery circuits. The Examiner takes notice that minimizing skew values and using a delay locked loop circuit for clock delivery are well known IC test parameters, Because claim 15 of '379 is directed towards clock delivery it would have been obvious to one of ordinary skill in the art at the time the invention was made to

include within the device claim 15 of '379 such known clock delivery circuits so as to receive the expected benefits derived there from such as enhanced system reliability absent a showing of unexpected results or synergistic results from any particular claimed combination.

Claim 19 and 32 are directed towards circuits with MEMS components. Because the device of claim 1 of '379 is in the art of IC testing and because it is known that MEMS components are controlled by such ICs, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of claim 1 of '379 such known MEMS components so as to receive the expected benefits derived there from such as enhanced system flexibility absent a showing of unexpected results or synergistic results from any particular claimed combination.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Grupta *et al.* (5,996,083) discloses power control through voltage and sensor control.
Sandhu *et al.* (6,006,169) discloses trimming ICs.
Bertin *et al.* (6,345,362 B1) discloses reducing CPU power using table data.
Garey (6,662,302 B1) discloses predetermined configurations for bus width.
Williams *et al.* (6,772,352 B1) discloses temperature curve processor control.

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Craig Steven Miller whose telephone number is (571) 272-2219. Central facsimile services are now available at (703) 872-9306.

The Examiner can normally be reached on Mondays through Thursdays from 6:30am-2:00pm EDT. Should repeated attempts to reach the Examiner be unsuccessful, the Examiner's Supervisor, Marc Hoff may be reached at (571) 272-2216.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Private PAIR system, see http://pair-direct.uspto.gov. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Craig Steven Miller (ss)
08 December 2004

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